

**AMENDMENTS TO THE CLAIMS**

The following claims replace all prior versions and listings of claims in the application:

1 (currently amended). A method for identification of memory address allocation conflicts of a plurality of finite buffers within a defined memory space, comprising the steps of:

entering a list of said finite buffers and corresponding memory address allocations;

scanning said memory address allocations from a first memory address to a second memory address within said defined memory space;

creating a link list of primary memory addresses correlating to the start and end of each of said finite buffers;

creating an ordered list of said primary memory addresses and corresponding buffers which include said addresses from said link list of primary address list addresses.

2 (new). The method of claim 1, further including:

evaluating said primary memory address list to determine memory allocation overlap.

3 (new). The method of claim 1, further including:

providing a visible interval table, and

providing a visual indication of co-located buffer assignments.

4 (new). The method of claim 1, further comprising:

identifying intermediate memory addresses between said primary memory addresses excluding said intermediate memory addresses from said ordered list.

5 (new). A method for identification of memory assignment conflicts in the assignment of memory location addresses to a set of buffers, comprising  
mapping a plurality of buffers to user defined addresses;  
assigning start and end addresses for each of said buffers;  
mapping said buffers to a defined location within said memory to create a specified memory map;  
creating a buffer allocation table;  
reading buffer locations, sizes and overlays from said buffer allocation table;  
evaluating the validity of said specified memory map;  
providing an error notification if said specified memory map is in error;  
creating a validated memory table for runtime buffer manipulation if said specified memory map is valid.